

## AMENDMENTS TO THE CLAIMS

### Claims Pending:

- At time of the Action: Claims 1-39
- Amended Claims: Claims 1, 22, and 39
- After this Response: Claims 1-39

The following listing of claims replaces all prior versions and listings of claims in the application.

1. (Currently Amended) A multi-media processing method comprising:  
providing multiple tracks each of which being capable of being associated with one or more digital data streams;  
representing the multiple tracks as a single track; and  
processing the digital data associated with the single track using a programmable software-implemented matrix switch in which multiple inputs can be routed to multiple outputs, the quantity of multiple inputs and the quantity of multiple outputs being scalable [.] ;  
coupling one or more of a scalable plurality of input pins to a scalable plurality of output pins of a matrix switch filter; and  
reducing filter graph complexity, wherein computational and memory resources are reduced.

2. (Original) The method of claim 1, wherein said act of representing comprises representing at least one transition between at least two of the multiple tracks.

3. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim

2.

4. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 3.

5. (Original) The method of claim 1, wherein said act of representing comprises representing at least one effect applied to at least one of the multiple tracks.

6. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim

5.

7. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 6.

8. (Original) The method of claim 1, wherein said act of representing comprises representing at least one transition between at least two of the multiple tracks and at least one effect applied to at least one of the multiple tracks.

9. (Currently Amended) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 8.

10. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 9.

11. (Original) The method of claim 1, further comprising operating upon said single track by applying at least one transition between at least two of the multiple tracks.

12. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 11.

13. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 12.

14. (Original) The method of claim 1 further comprising operating upon said single track by applying at least one effect to at least one of the multiple tracks.

15. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 14.

16. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 15.

17. (Original) The method of claim 1, further comprising operating upon said single track by applying at least one transition between at least two of the multiple tracks, and at least one effect to at least one of the multiple tracks.

18. (Previously Presented) One or more computer-readable media having computer-readable instructions stored thereon which, when executed, implement the method of claim 17.

19. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 18.

20. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 1.

21. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 20.

22. (Previously Presented) A method comprising:  
providing multiple tracks each of which being capable of being associated with one or more digital data streams;

grouping a particular set of operations on the tracks to provide a group upon which operations can be performed that do not affect tracks that are not in the group;  
wherein said grouping comprises defining a first hierarchical tree structure that represents a media project of which the tracks comprise a part; and

using the hierarchical tree structure to program a software-implemented matrix switch configured to process content of said tracks, the matrix switch being configured to route a scalable number of inputs to a scalable number of outputs [.] ;

coupling one or more of a scalable plurality of input pins to a scalable plurality of output pins of a matrix switch filter; and

reducing filter graph complexity wherein the computational and memory resources are reduced.

23. (Original) The method of claim 22 further comprising operating on said tracks using said particular set of operations.

24. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 23.

25. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 24.

26. (Original) The method of claim 22 further comprising operating on said tracks using said particular set of operations, wherein said particular set of operations comprise at least an effect.

27. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 26.

28. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 27.

29. (Original) The method of claim 22 further comprising operating on said tracks using said particular set of operations, wherein said particular set of operations comprise at least a transition.

30. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 29.

31. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 30.

32. (Original) The method of claim 22 further comprising operating on said tracks using said particular set of operations, wherein said particular set of operations comprise at least an effect and a transition.

33. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 32.

34. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 33.

35. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 22.

36. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 35.

37. (Currently Amended) A data structure embodied on a computer-readable storage medium executable on a computing device, the data structure comprising:

one or more portions associated with at least one track of a multi-media editing project, individual tracks being associated with one or more data stream sources; and

one or more portions associated with a composite, the composite comprising at least one track, said data structure being configured for use in programming a software-implemented matrix switch which is configured to provide a data stream defined by the multi-media editing project, the matrix switch being configured to route a scalable number of inputs to a scalable number of outputs [.] ;

wherein the matrix switch being configured to support implementation of a cascaded architecture utilizing feedback paths;

wherein the data structure comprises a programming grid to couple one or more of a scalable plurality of input pins to a scalable plurality of output pins of the matrix switch filter.

38. (Original) The data structure of claim 37 further comprising one or more portions associated with a composite that is nested inside of another composite.

39. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 37.